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THE STATE OF PLAY IN MALTESE SPORT: EXPLORING MALTA'S CURRENT ELITE SPORT CLIMATE WITHIN A SMALL STATES SETTING[*]

Andy Grech, Dave Collins and Pippa Chapman[#]

Abstract

An increasing number of nations around the world are developing high performance sport systems in order to compete in global competitions. Unfortunately, the research on smaller states is somewhat lacking, furthermore high performance sport in Malta is also an under-researched theme in local sport literature. The research sought to understand the current 'state of play' of elite sport in Malta. Using the Sport Policy Leading to International Sporting Success' (SPLISS) model as a starting point, the research uses a standardised survey to explore the perceptions of key stakeholders in high performance sport in Malta in terms of current experiences and future expectations. Measuring perceptions against the SPLISS pillars found dissatisfaction amongst stakeholders: in spite of some useful financial investment in the system, there are structural issues that need to be overcome, some of which are influenced by the macro-level environment of the challenges that Malta faces as a small island state, including lack of infrastructure and loss of human capital. This work provides insight in to the current situation of elite sport in Malta, from which further work could be undertaken, and also raises questions about the value of the SPLISS model when investigating small states.

Keywords

Sport policy; Sport development systems; High performance sport; Micro-states; Malta

1. Introduction

The pursuit of international sporting success has intensified over the past years (Houlihan & Zheng, 2013) and Malta is no exception to the trend. Literature suggests how large state investments, funding and sport policy are directly proportional to success in elite sport (De Bosscher *et al.*, 2011; Hogan & Norton, 2000; Oakley & Green, 2001a, 2001b; Shibli, 2003). It is for this reason that elite sport development systems have become very compelling to nation states that are able to afford them (Green & Oakley, 2001). A set of principles which are founded on a common framework "can be adopted to local circumstances in a culturally appropriate manner" (Cunningham *et al.*, 2015, p.105). Indeed, many believe this to be echoing the concept of diminishing contrasts (Dixon & Gibbons, 2014; Green & Oakley 2001; Houlihan, 1994, 1997; Maguire, 2011;). Yet, it is the nation's governmental traditions and patterns that define the shape of the sport system in question.

Maltese high-ranking governmental officials seem eager to improve the level of sport. On an online interview, the former Maltese Prime Minister publically stated, "Government will continue investing in infrastructure and clear strategies to achieve results of an international calibre, not on one-off occasions, but in a regular fashion," (Micallef, 2018). In May 2019,

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Malta's third national sports strategy was launched by the government: intended to cover a 10-year period, this policy will see up to €30 million invested in new sport facilities and a further €6 million invested in athlete training, over and above the €11 million granted to Sport Malta every year (Muscat, 2020). In addition, research on Maltese sport and its athletes has increased (Muscat, 2018; Mangion, 2018) but this work has focused on the betterment of the physiological and psychological individual rather than exploring the context and impact of these clearly welcome but potentially less well targeted initiatives.

With regard to this targeting process, it is clear that a range of accurate data is required. Indeed, a country intent on being successful on the world stage would need to identify the correct combination of methods which have been proven to successfully work within the nation's culture (Cunningham *et al*., 2015), as opposed to simply copying other successful nations with better sporting results. Unfortunately, Malta has rarely assessed its possible differences, challenges or shortcomings within an organisational or policy setting in relation to sport: this despite a plethora of local sporting entities and individuals expressing their opinion and make assumptions into the reasons why Malta is falling short in Elite Sport (Camilleri, 2021). In an interview Parliamentary Secretary for Sport, Youth and Voluntary organisations, Clifton Grima professed openly "it's useless being the best of the weakest" (Zammit 2019). Despite the desire to perform better in international sport, and the localised intensification of funds, local literature is scarce. Therefore, before any conclusions are formed and plans made, an in-depth study on Malta's sporting context is essential. Accordingly, this paper aims to provide a deeper insight into the Maltese elite sport climate.

2. SPLISS – A possible framework for analysis

In generating this insight, it would be useful to build against an established and valid framework. As mentioned earlier, there are already several generic systems described for the promotion of sporting performance. Using existing literature and previous studies on elite sport systems, De Bosscher *et al*., (2006), were able to group together all resources into well-defined major policy areas which, according to their sampled nations, have the largest influence on international sporting success. These very same factors were later used to appraise, discuss and compare data across the various nation states. Sport Policy Leading to International Sporting Success' (SPLISS) long term goal is to "increase our knowledge about the optimum strategy for delivering international success and the key performance indicators that demonstrate that an efficient and effective management of sporting excellence is in place" (De Bosscher *et al*., 2006 p. 13). It is for this reason that De Bosscher *et al*. (2006) model of determining success is believed to be the best guide to carry out our local study.

SPLISS' 9 pillar model

Schembri (1998, p.8) reminds us that "Social, cultural, historical and political factors are all important considerations in shaping the architecture of a country's sport system" and that "foreign models should be for comparison and to trigger thoughts, not for prescription or adoption". It is with this logical thinking that we decided to follow SPLISS associated themes and tackle each area (pillar) with forethought. The SPLISS project utilizes the following 9 Pillar Model as a framework for data collection. (1) Financial support; (2) integrated approach to policy development; (3) participation in sport; (4) talent identification and development systems; (5) athletic and post career support; (6) training facilities; (7) coaching provision and

coach development; (8) international competition; and (9) scientific research (De Bosscher *et al*., 2006).

A clear understanding of these pillars is imperative to this study. When we take a closer look, pillars 3, 4 and 5 are believed to be an extension of one another. The sequence would usually start at pillar 3, when an athlete is introduced to the world of sport. Should the individual be promising, special attention will be presented to him/her in the next pillar (talent development phase - pillar 4). Given the athlete continues to excel in his/her sport and eventually reaches elitism, he/she will begin competing at pillar 5. According to Bloom (1985), the three phases of an athlete's development are similar in characteristic to that of art and science. Unfortunately however, the path to sporting elite is often burdened by different forms of pressures and strains, hence the reason why strong supporting 'pillars' are needed to help support the athlete and maintain the best possible setting for performance (De Smedt, 2000). In elite sport development (such as in our study), the athlete will always remain the central focus.

Pillar 1 (financial and human resources) and pillar 2 (policy development) are both fundamental to the development of the individual and the sport. This pair of pillars are described as the *inputs* of sport policy. In theory, a greater investment should result in creating better opportunities for athletes. Yet clearly, the simple presentation of additional funds does not guarantee success. Impact would depend on the structure and organisation of sport in a particular country (pillar 2), and its relationship with the existing society that better the country's opportunities and efficient of resources fused to better chances (SIRC, 2002). Furthermore, investments in the remaining four pillars are central to the development of elite athletes. Sufficient facilities of high quality (pillar 6) and proficient coaches (pillar 7) are both valid examples of how the furtherance of development can aid athletes' development. In addition, a factor which is believed by many authors to influence international success is the organisation of international events (pillar 8) the positive effect on the success of the host nation (see, among others Bernard & Busse, 2001, 2004; Clarke, 2002; Johnson & Ali, 2002; Kuper & Sterken, 2001). Applied research and a network of sport medicine (pillar 9) is the final piece to the puzzle, and is used for nations who "want to outperform others" (Shibli, 2003, p.91).

We believe that by understanding, anticipating and isolating domestic issues and priorities, the handling of global pressures as well as the effective management of limited resources (human or financial), we might help academics and policy makers identify and possibly prioritise what is needed for the development of local sport. De Bosscher *et al*. (2016) noted that some pillars will have more weight for some nations than others due to each nation's attributes, therefore we deemed fit to adjust and focus more on participants' beliefs about the most influential pillars from a local standpoint, and later applied different weighting as needed, thereby increasing efficiency and effectiveness throughout our study.

Macro, meso and micro level factors

By investigating three main target areas and all pertaining factors, we hoped to probe the exact impact and mechanism of our measurable criteria. At the micro-level, one will find the involvement of athletes and their respective coaches. These main stakeholders were investigated by means of controllable factors, whilst other aspects such as genetics were not

tested. Our decision to carry out our research through the eyes of Maltese high-level athletes and coaches is twofold. Firstly, we acknowledge that far less attention has been placed on Maltese micro-level stakeholders and their perception of the national sport system. Moreover, it is believed to be easier to investigate and compare a nation's micro-level factors as opposed to factors at the meso-level (De Bosscher *et al.*, 2006).

Factors at the meso-level are mostly built upon sport policies and governance. This level is considered the easiest to alter or change, yet these alterations or changes might only take effect over the long-term. Nevertheless, athletes have a better chance of success through effective policy and wise-investment decisions, and that is why our exploration is based mostly on the interpretation of underlying meso-level themes.

Of course, and as stated earlier, you simply cannot impose a champion mentality or a medal winning culture in a country through money alone. Especially since micro-states like Malta might have other pressing priorities. It is for this reason that medal expectations and sporting success of nation states are mostly grounded on the populace's social and cultural backgrounds (macro-level). Research at the macro-level is easily quantifiable and easily accessible in comparison to studies and research at the meso-level (De Bosscher *et al*., 2006). In an ideal structure, however, the three levels discussed should continuously act jointly and never be totally segregated from the social or cultural frameworks of the country (De Bosscher *et al*., 2006). Especially since that some form of ripple effect could theoretically take place across all three levels.

Testing the accuracy of perceived knowledge and expectation

Research has been conducted on the elite sport systems in successful nations in the hope of understanding the input-throughput-output factors which lead to international success. Unfortunately, less is known about the relationship between systems and their impact on success making results inconclusive, their suggestions weak and a challenging task for any government or agency to implement (De Bosscher *et al*., 2006). However, only a small number of studies have been carried out on similar structural factors (Eising, 1996; Stamm & Lamprecht, 2000, 2001; Van Bottenburg, 2000) and there is a lack of clarity to what end national organisations spend such large amounts of their funds on policies which have not been empirically tested.

Taking SPLISS into account, various authors have built a statistical relationship between key groups of independent variables and indicators of elite sport policy success. Notably, however, Henry *et al*., (2020) suggest that SPLISS' researchers' methodology of choice most likely evolved out of convenience. In fact, many studies seem to make assumptions, whilst overlooking fundamental differences across numerous sporting systems. For example; variable-oriented empirical research is based on the assumption that all populations are homogenous. Yet, De Bosscher and her colleagues confess that during their study " … comparisons of sport expenditure are challenging, as expenditure definitions and sport policy delivery mechanisms vary considerably from nation to nation" (De Bosscher *et al.*, 2015, p.109). Furthermore, SPLISS data was only collected from nations that have won Olympic medals.

Based on these factors, there will be a need to adjust some of the pillars to more closely fit the specific environment. Extending this contention, and when we remember the stark differences in socio-economic profiles (population size and GDP per capita), the differences in sport policy systems and international performance, as well as the practical methodological challenges of comparing sporting nations, these differences are further amplified through a micro-state like Malta. By taking into account the above, this study's objective was to provide readers the hope to identify isolated insights into elite sport policies, however based on micro-states' socio-economic profiles comparable to their own and offer some insight into the applicability of SPLISS in a micro-nation.

The rationale and the objective of the study

Altrichter *et al.* (2002) describe action research as a method of reflection with the purpose of investigating reality in order to change it. Our use of action research has been based on and bolstered by a long series of assumptions put forward by primary stakeholders in Maltese elite sport. Further assumptions put forward by the local media are equally fundamental to this research, as they have become embedded in Maltese culture and common belief. Originating from the work of Connolly *et al.* (1980), the understanding and classification of our participants' opinions are pivotal to a study such as this. Furthermore, it is important to mention that explicit statements will form different interpretations. Consequently, we made sure that our demands were general enough to apply to all sports, whether individual or team, included in the study (Papadimitriou & Taylor, 2000).

We believed that the best way of generally isolating Malta's relative strengths and weaknesses in different policy areas was through visualisation by way of scoring our participants' choice count (CCs) as well as different (quantitative) composite indicators (CIs) across several of our preferential themes. Generally used by researchers to summarise a number of observed facts, this tool has proven useful in policy analysis and to compare country performance on a particular topic (e.g., Nardo *et al.*, 2008).

We aimed to improve awareness around the promising relationship between effectual sport polices in place and their success, yet it is important to note that these quantitative summative results alone are still not sufficient in fully realising the level quality of the Maltese sport climate. The study was designed to address three major objectives:

(1) To evaluate the perceived performance of Maltese sports systems on pivotal markers (as defined by SPLISS) through the eyes of local stake holders;
(2) To explore the realities of participants' lived experiences within the Maltese system;
(3) To evaluate participants expectations for the future of Maltese sport, against the accuracy of their understanding of foreign resources and system drivers.

3. Methods

Research design

The investigation was carried out through a quantitative (close ended standardised questionnaire) method, using purposely designed systematised questions. Data was collected between January and February 2020 (importantly, prior to the potential confounding influence of COVID-19) and deliberately targeted at a spread of local elite athletes and coaches (n=267).

The survey was structured to act in accordance with the following themes.

- Demographic and situational findings (age, gender, sport practiced and role)
- Perceived perceptions of quality are our respondents' expectations and levels of satisfaction of the context.
- Who is responsible? An opinionated set of questions will investigate who our respondents believe should be responsible.
- Status Quo; a set of questions aimed at acquiring the accuracy of participants' understanding of the current resources and system drivers.

Data Analysis

The specific purpose of the survey design was to "obtain different but complementary data on the same topic to best understand the research problem". (Creswell *et al.*, 2007, p.62). By means of a widespread search of literature on Malta, we were able to contribute to our first and second order themes in which we underlined meaningful key categories according to De Bosscher & De Knop's model of determining success (2006); specifically, those considered to be central to elite sport and its success. As a result, increasing the weight of our content and 'interpretative consistency' (Tashakkori & Teddlie, 2003). We would highlight that perceived quality is based entirely on our participants' opinion and linked to the personal circumstances of each individual, hence the importance put forward by our demographic section.

This paper and its methodological intention is not focused on assessing Maltese strengths and weaknesses, or to rank pillars alone. Through the use of CCs and CIs, a scoring system was purposely created to help all stakeholders evaluate perceived broad performance, (Truyens *et al.,* 2015) their knowledge on an under researched topic (Maltese sport policy) and encourage stimulation and 'food for thought'. Through the use of the five-point Likert scale choice counts (CCs), cumulated Composite Indicators (CIs) scores were used to rank the performance of all pillars according to the participants' responses. Congruent with the aforementioned Likert scale, scores were calculated by multiplying the response values in the respective manner; 5 (well developed), 4 (developing policy area), 3 (moderate level of development) 2 (limited development) and 1 (little or no development). Through this method, data collected from each question throughout the survey were made into summable criteria and used to profile each distinctive pillar, as well as a significant macro, meso or micro factor connotation. In short, CIs offered a calculated index of participants satisfaction with each of the pillars or factors, with higher scores indicative of a more positive perception. Additionally, participants were next systematically divided into team or individual sport to highlight potential differences due to the nature of the sport.

To sum up our theoretical synopsis, pillar 1 and 2 are considered to be the *input* markers whilst pillar 3 through 9 are considered to be the *throughput* markers. As stated in the effectiveness literature, a multidimensional approach criteria should be measured at each stage of the process, i.e.: input, throughput and output cycle (Chelladurai, 2001). In the case of SPLISS, the success of these pillars delivered in what is called the *outputs*, were defined and measured up against the number of medals won by nations at the Olympic Games. The number of medals won at the Olympic Games has been described by politicians and the media as the best method of measure in high performance sport (Gärtner, 1989; Grimes *et al*., 2002; Kelly & Rubin, 1974; Kiviaho & Mäkelä, 1978; Levine, 1974; Novikov & Maximenko, 1972).

Unfortunately, however, Malta has not yet won an Olympic medal. Therefore, our second best option for comparison was to compare the local elite sport model with the number of medals won at Games of the Small States of Europe (GSSE) between the years of 2013-2021. Each medal was given a score (gold = 3 points, silver = 2 points and bronze = 1 point). This enabled us to carry out several interesting contrasts, shedding more light on the impact and operation of Malta's sport climate. Objective data were finally processed using the 'Qualtrics' online data-gathering platform. The number of questionnaires returned resulted in 90 participants.

4. Results

Demographic and situational findings

Table 1 shows the sample depicts an approximate ratio of 3 males for every 2 females partaking in the survey. With regards to groupings for 'Age' we can appreciate a varied population age within our sample. One might also appreciate that the largest amount of input came from our local elite athletes. 59 (65.56%) of Malta's currently active elite athletes undertook the survey, making it an athlete-centered demographic. This group was followed by coaches (14.44%). This survey was targeted at seeing an overall view of the local sport scene. Still we can immediately see that our survey was mainly through the lens of the micro-level players (80% in total). Only 5.6% of our sample's participants (1 Council member and 4 Administrators) belonged to the meso-level respectfully.

Table 1 - Demographic and situational findings

Variable	*Group*	*Frequency*	*Percentage (%)*
Gender	Male	62	68.89
	Female	28	31.11
Role	Athlete	59	65.56
	Coach	13	14.44
	Official / Referee	3	3.33
	Committee	1	1.11
	Administrator	4	4.44
	Other	10	11.11
Age	Youth (under 16)	5	5.56
	Junior (16 – 21)	22	24.44
	Open (22 – 35)	38	42.22
	Veteran (36 –	20	22.22
	51 - 64	5	5.56
	65 and above	0	0

In principle the research was designed and targeted for a range of Olympic sports. Table 2 shows the participant contribution from the different sports practiced in Malta. Results are dominated by football and athletics, confirming that the pair are presently two of the most popular sports practiced (Kanter Media, 2018). Each of the introductory questions suggest that the sampling of this survey is objective and representative. These broad varieties of groupings provided us with diversity in perceptions related to elite sport policy; with the hope of being reflected throughout our results.

Table 2 - Sports involved

Group	*Frequency*	*Valid Percentage (%)*
Football	25	27.8
Athletics	22	24.4
Water polo	8	8.9
Basketball	5	5.5
Badminton	3	3.3
Field Hockey	3	3.3
Sailing	3	3.3
Handball	3	3.3
Swimming	2	2.2
Volleyball	2	2.2
Other	10	11
None	4	4.4
Total	90	100

Perceived perceptions of quality

Table 3 presents a clear indication of our respondents' perception of satisfaction and CI and CC scores alongside SPLISS' pillars. Notably, one might recognise that 26.09% and 24.59% of our respondents (over half our sample size) seem clearly dissatisfied across all discussed pillars. At the other end of the scale, total mean scores of 3.09 and 13.10 reflect the percentage of participants selecting the most positive of options; 'Definitely yes' and 'probably yes' respectively. According to our CI scores we can see that Pillar 9, 3 and 6 (underlined) were the pillars which were rated lowest in quality ratings. Whilst pillars 4, 2 and 5 (in bold) were the highest respectively. Notably, there is only a difference of 40 CI points which divides the polarised results. Furthermore, according to our compilation of scores, pillar 4 is the only factor of the 9 to score above the half way mark of 225 points (227). The mean total score of 209.06 displays the overall perceived quality score on all counts.

In Table 4, respondents were systematically divided depending on the nature of their sport (individual vs team sport). Still, no clear difference in general quality of levels were noted, as neither type of sports score past the half way mark. The mean level of satisfaction was marginally lower in individual sport (2.3) as opposed to (2.4) in team sports. Furthermore, a few individual differences were noted amongst pillars; the lowest scoring pillars with regards to team sports were pillar 9 (2) and pillar 7 (2.3), whilst pillar 6 (2.1) and pillar 9 (2.1) were the lowest for the individual sports respectively. The only pillars to have surpassed the half way mark belonged to pillar 5 (2.6) in team sports and pillar 4 (2.6) in individual sports. The margin of difference between the highest and lowest ranking of mean score was a 0.62 in team sport and that of 0.44 in individual sport – once again notable for the small variation which indicated a homogeneity of perception.

Table 3 - Respondents perceptions score per pillar

	Def. yes		*Prob YES*		*M/M*		*Prob NO*		*Def. No*			
SPLISS Pillars	CC[1]	CIs	CC	Cis	CC	CIs	CC	CIs	CC	CIs	**T. CIs**	**Mean S/par**
Pillar 1	5.5	27.5	12	48	20.5	61.5	22	44	29.5	29.5	210	2.3
Pillar 2	2.8	13.8	13.5	54	24.3	72.8	27.3	55	20.5	20.5	**215.5**	**2.4**
Pillar 3	1.7	8.35	11.3	45.3	19.3	57.9	30	60	26.7	26.7	198.3	2.20
Pillar 4	2	10	15	60	26	78	33	66	13	13	**227**	**2.5**
Pillar 5	2.33	11.6	17	68	24.3	72.9	21	42	24	24	**218.6**	**2.4**
Pillar 6	7	35	11	44	16	48	21	42	34	34	203	2.3
Pillar 7	2.33	11.7	14.7	58.7	22.7	68	20.7	41	28.3	28.3	208	2.3
Pillar 8	3.23	16.1	13.5	53.8	22.7	68.1	26.4	53	22.9	22.9	213.7	2.4
Pillar 9	1	5	10	40	22	66	20	40	36	36	187	2.1
Mean/ res.	**3.09**		**13.1**		**22**		**24.6**		**26.1**			
											209	*2.3*

Table 4 - Team vs Individual Sport, perceptions score per pillar

	Def yes		*Prob Yes*		*M/M*		*Prob. No*		*Def NO.*		*Total CI score*		***Mean S. / par***	
Pil.	TmS[2]	IS[3]	TmS	IS	TmS	IS	TmS	IS	TmS	IS	TmS/ 230	IS/ 220	**TmS**	**IS**
P1	17.5	10	22	26	30	31.5	23	21	15.5	14.5	108	103	2.35	2.34
P2	5	8.8	27	27	39.8	33	30	24.5	10	11.2	111.8	104.5	2.43	2.38
P3	2.5	7.5	26	28	36	37.5	38	27	8	9	110.5	109	2.4	2.48
P4	0	10	36	24	33	45	40	26	6	8	115	113	2.5	**2.57**
P5	8.4	3.4	37.3	30.7	45	27	19.3	22.7	10.3	14	120.3	97.7	**2.62**	2.22
P6	10	1.7	29.3	29.3	44	23	17.3	24	13.3	15.7	114	93.65	2.48	2.1
P7	20	15	20	24	30	18	18	24	18	17	106	98	2.3	2.2
P8	8.5	8.9	25.8	28	37.1	34.9	27.8	21.5	11.5	11.8	110.8	105.1	2.41	2.4
P9	0	5	16	24	33	33	24	16	19	17	92	95	2	2.2
											Total mean score / participant		*2.38*	*2.32*

Moving on to Table 5, we can begin to appreciate questions which pertain to the three different SPLISS levels (Macro, Meso and Micro) which once again lie at the lower level of the quality spectrum. According to the CI scores awarded, none of the factors exceeded the half way point and all seem to be in close range. A total of 13.4 points separate the highest and lowest level scores. According to our participants' mean quality score, micro-level factors seem to be highest in quality, albeit by a minimal margin (.15), once again demonstrating a low-level of development.

[1] CC - Choice count
[2] TmS – Teamsport Sport
[3] IS – Individual Sport

Table 5 – Respondents and CI scores per SPLISS level (MACRO, MESO & MICRO)

	Def Yes		*Prob Yes*		*M / M*		*Prob NO*		*Def NO*			
	CC	CIs	CC	CIs	CC	CIs	CC	CIs	CC	CIs	***T. CI Score / level***	***Mean S. / par***
Micro level	3.8	18.8	16.3	65	24.8	74.3	20.1	40.1	23.3	23.2	**221.3**	**2.46**
Meso level	3.4	17	12.6	50.4	22.8	68.4	24.9	49.8	25.1	25.1	210.7	2.34
Macro level	0	0	12	48	24	72	37	74	14	14	208	2.31
Mean/res.	**2.38**		**13.6**		**23.9**		**27.3**		**20.8**			
											Total mean score / participant	*213.4*	*2.37*

In Table 6, participants once again were systematically divided depending on their sport. For the fourth time, focuses fell below the general half way mean mark, (2.33 team sport and 2.28 individual). With reference to Table 4 and 6, team sport participants seem somewhat more satisfied with the current situation of the Maltese sport climate. On an encouraging note, the only individual SPLISS level which surpassed the half way mark belonged to team sports (2.56) at the micro level. Whilst Individual athletes believe that the Meso level (2.32) is marginally the most developed from the three ranges. On the other hand, the macro level seems to be the level respondents collectively agree on to be the poorest in quality, with a mean result of 2.06 and 2.22 for team and individual sport respectively.

Table 6 - Team vs Individual CI scores per SPLISS level (MACRO, MESO & MICRO)

	Def Yes		*Prob no*		*M/M*		*Prob No*		*Def No*		***T. CI score***		***Mean S.***	
	TmS	Is	TmS	Is	TmS	Is	TmS	Is	TmS	Is	TmS /230	IS/ 220	TmS	Is
Micro	7.5	34	29.3	20.5	44.3	29.3	20.5	34	0	7.5	118	104	**2.56**	2.3
Meso	8.5	25.2	32.4	22.8	36	32.4	27	25.2	12.5	8.5	109	102	2.37	**2.32**
Macro	0	32	27	30	30	27	44	32	5	0	95	98	2.06	2.22
											Total mean score / participant		*2.33*	*2.28*

Who is responsible? - Ascribed responsibility per sport governing entity

At this point, it important to state that we believe local policy makers are responsible to set future goals for the different stakeholders involved in sport. However, the next set of opinion-focused questions were put forward to help clarify who our respondents believed to be responsible for improving the aforementioned themes. Our country's potential in international elite sport rests on the abilities of the forthcoming stakeholders. Respondents were asked to rank the relevant organisations/structures in order of accountability. Table 7 establishes that the entity mostly seen as responsible for Malta's current sport climate falls upon 'the Ministry for youths, sports and voluntary organisations', after 39 (43.3%) respondents selected it first on the list, resulting in a mark of 195. This was seconded by SportMalta (Malta's umbrella sport organization) with a total mark of 251. Individual sport governing bodies were placed in third place (279), followed closely by the Maltese Olympic Committee (306).

Table 7 - Ascribed responsibility per sport stakeholder

Variable	*Mean*	*Std Deviation*	***Ascribed responsibility***
SportMalta	3.02	1.73	**251**
The Ministry for Youths, Sports and Voluntary Organisations	2.35	1.74	**195**
Individual sport governing body	3.36	1.55	**279**
Coaches	5.05	1.36	**419**
Athletes	5.76	1.74	**478**
Clubs	4.77	1.32	**396**
Maltese Olympic Committee	3.69	2	**306**

In a similarly structured question, Table 8 depicts our participants' belief per SPLISS level. Strangely, participants ranked micro-level factors as the main determinants of disadvantages within the national set up, even though meso level players were earlier held liable. Affirming our results, 28 and 27 participants believe that Micro and Macro factors are the largest factors which lead to Malta's disadvantages in sport. As opposed to our previous question variable results seem far less distributed, especially with regards to Micro and Macro level factors.

Table 8 - Ascribed responsibility per SPLISS Level (MACRO, MESO & MICRO)

Variable	*Mean*	*Std Deviation*	*Ascribed responsibility*
Micro Level	1.94	0.81	**163**
Meso Level	2.06	0.81	**173**
Macro Level	2.32	1.04	**195**
Other	3.68	0.83	**309**

Malta's Status Quo

In this context, we believe it equally important to mention that the use of CIs are designed to understand and support our results on local elite sport policy and objectify its level of success. Of relevance, elite sport policies are believed to be far too complex to simply understand

through CIs alone. De Bosscher *et al*. (2006) remind us that our best possible measure to ascertain the competency of our local sport policies is through our outputs.

The number of medals won at the major games is believed by many to be the best method of measure in high performance sport. Despite the welcoming and positive increase in local investment, Table 9 clearly highlights a few of the problems elite sport in Malta is facing. If we look at the years between 2015 and 2019, all-round investment in sport increased substantially. Yet, due to a reduction of total medals won, the 'price per medal' almost doubled. Should our policy makers fail to act immediately, (and according to 2021 budgetary estimates) Maltese elite sport might continue on this downward spiral, resulting in the tripling of price per medal won. An interesting exercise could be organized between each participating national sport organizations, in the hope of identifying who provided the best value for money and who did not.

Table 9 - Expenditure on sport vs GSSE medals won

Year	*Expenditure on Sport (€000)*	*Medals won at GSSE games*	*Medal scores*	*Cost per medal point (€000)*	*Cost per medal (€000)*
2015	5,697	32	49	116	178
2017	7,864	29	46	180	271
2019	9,175	27	51	180	340
2021	15,040[4]	27	51	295	557

As a reminder, the next set of questions were aimed at acquiring the accuracy of participants' understanding of the current resources and system drivers. Being aware, understanding and acknowledging Malta's elite sport climate is essential to our study as this proves whether vertical coordination is effective. Often a time disorganisation leads to a certain level of unnecessary rivalry amongst different sport disciplines.

In Table 10, participants were given the option of choosing what they believed to be the amount of expenditure on sport (general sport) for the year of 2018. The correct answer was the bracket of less than €15 million as stated by the National statistics office (2020). Respondents were roughly correct, with a total of 63.22.4 % selecting the correct amount. This could indicate that participants and, by extension, the sport population in general feel the lack of funds allocated to general sport. At least, however, their expectations are based on an accurate perception!

Table 10 - Budget for 2018

Question no. 21	*Variables*	*Choice count*	*CC (%)*
What do you believe was the total budget for general sport and physical activity in 2018?	less than €15 mil	55	**63.22%**
	€15 - €20 mil	24	27.59%
	€20 - €25 mil	4	4.60%
	more than €25 mil	4	4.60%

[4] based on Maltese Government financial estimates for 2021

In Tables 11 and 12, participants were asked to indicate their belief on financial remuneration provided to board committee members as well as athletes. In all likelihood, it would seem as though participants' choice mostly interprets the 'true for some' choice, which is correct on both occasions. With regards to local elite athletes, football and waterpolo are the only two sports able to provide a tangible financial wage packet to its elite athletes. Yet, the only national governing body (NGB) which provides financial remuneration to its board members, as well as its working staff is the Maltese Football Association, whilst the Aquatic Sport Association of Malta, as well as every other NGB on the island fulfils their council's obligations on a voluntary basis.

Table 11 - Board member's remuneration

Question no. 22	*Variables*	*Choice Count*	*CC (%)*
How accurate is this statement? "Board members across all sports associations are volunteers, and receive no kind of financial remuneration?"	True for everyone	9	10.34%
	True for some	43	**49.43%**
	50/50	17	19.54%
	Only true for a few	15	17.24%
	Not true at all	3	3.45%

Table 12 - Elite athletes' remuneration

Question no. 23	*Variables*	*Choice count*	*CC (%)*
How accurate is this statement? "local elite athletes have no financial support, incentives or rewards"	True for everyone	10	11.49%
	True for some	39	**44.83%**
	50/50	17	19.54%
	Only true for a few	18	20.69%
	Not true at all	3	3.45%

In Table 13 we can appreciate that a large majority of respondents believe that local level of sport would increase should stakeholders have better incentives. Close to half (47.13%) of our respondents believe that it is essential, and a further 35.63% believe it would be an important change. It is interesting to note that none of the respondents selected the variable 'this would not help at all'. Thereby strongly encouraging the prospect of an increase in administrative support to all involved.

Table 13 - financial support and incentives

Question no. 24	*Variables*	*Choice count*	*CC (%)*
Do you believe that sport in Malta will improve if all stakeholders have better financial support, incentives or rewards?	YES - Its essential	**47.13%**	41
	MAYBE - It would be an important change	35.63%	31
	PERHAPS - It would make some difference	14.94%	13
	NOT REALLY - This would help but is not essential	2.30%	2
	NO - This would not help at all	0.00%	0

In Table 14, we returned to testing local primary stakeholder's knowledge on our policy makers' most recent publication on framework and strategy. Notably, 52 out of a total of 90 participants decided to abstain from answering this question. We surmise the main reason being uncertainty or disinterest. Nevertheless, of those who did respond, a percentile of 66.67 were correct in their answer, whilst a total of 33.33% participants were incorrect.

Table 14 - Malta's latest publication

Question no. 25	*Variables*	*Choice count*	*CC (%)*
How recently did Malta publish its' last national strategy for Sport and Physical activity?	2019	66.67%	32
	2018	25.00%	12
	2017	6.25%	3
	2016	2.08%	1
	2015 or earlier	0.00%	0
	Total	100%	48

The objective of question 26 exhibited in Table 15 was twofold. In essence, we hoped to ascertain our participants' belief in Malta's forthcoming strategy on sport, y*et al*l the while endorse our current government's ability to handle current sporting affairs. Unfortunately, results do not demonstrate the positive choice count policy makers would welcome. Over half of our respondents (51.72%) selected the MAYBE choice, whilst the PERHAPS option was second (27.59%). According to our results, it would seem as though respondents seem unconvinced that local policy makers have laid out the best foundations for a strong, adaptable and sustainable sport model.

Table 15 - Strategy and its effects

Question no. 26	*Variables*	*Choice count*	*CC (%)*
Do you believe that the above statement will have an effect on our local elite sport scene?	YES - It will	16.09%	14
	MAYBE - It would be an important change	51.72%	45
	PERHAPS - It would make some difference	27.59%	24
	NOT REALLY - This would help but is not essential	3.45%	3
	NO - This would not help at all	1.15%	1

5. Discussion

Attesting to our belief, the Maltese Parliamentary Secretary on research, innovation, youth and sport, boldly confessed that "Hundreds of elite athletes may have been lost over the years" (Ministry of Education and Employment, 2016, p.15). Still, the question remains as to why. This paper examined Malta's sport climate through various quantitative methods. Furthermore, through the use of CCs and CIs we have begun to identify the perceived strengths and weaknesses of the sport system in Malta. We were also able to assess how individual and team sports, albeit different in structure, sustained similar objectives and faced

similar problems. Questions were carefully chosen in the hope of gauging the level of quality over the efficiency of approaches. Although our CC and CI results depict discontent and poor levels of development throughout the entire system and our participants believe that the government is to blame for the nation's failures, a couple of notable issues must be raised for further discussion.

On a positive note, the increase in funds allocated shows commitment to the development of sport at an elite level. Yet, the course of action seems, at least as yet, to be unsuccessful. De Bosscher *et al*. (2006) remind us that the *inputs* and *output* of sport can easily be quantifiable, as opposed to the more challenging *throughput.* Taking a closer look into the assets needed to have a strong foundation of a sport organization, we must move away from our assessment of numbers and divert attention to our interest in the structure that supports Maltese elite athletes. The throughput mechanism refers to the competence of our local sports policies and by definition whether our inputs are being used appropriately to help reproduce the desired outputs. As a reminder, we believe that a structurally sound organization is critical for a realistic chance at international success. The sport in question proves superfluous, especially since the basic governmental objectives and structures of elite sport are similar in many ways (De Bosscher *et al*. 2006). According to the CI scores across Pillars 3-9, satisfaction levels amongst participants depicts overall discontent and the need to improve managerial policies at a national level before Malta can become more competitive in international events.

Due to a micro-states' lack of populace and the geographical situation (there are no bordering countries), Malta faces a disadvantage in human involvement, and as a result the throughput subdivision is grossly effecting the health of the inter-dependent pillars 3, 4, 5 and 7. In essence the strengths of pillar 4, 5 and 7 are supported by pillar 3. For reasons we previously discussed, Malta has added strain when the topic of increasing participant athletes is discussed, l*et al*one the parallel need to identify adequate elite coaches. Another important problem area surfaced when our collection of sports, irrelevant of the type, signaled that that the support to our micro-level stakeholders was lacking. Locally, as opposed to pillar 2, talent identification cases must be tackled on a sport specific basis, especially since many elite athletes are the result of grassroots participation.

We also felt the need to present participants with contentious issues on our local sport facilities and infrastructure. An important point to mention is that during SPLISS' field research, their team targeted some of the most sought after elite training facilities and institutes across all sample nations. On a local basis, micro-states like Malta will have to make do with smaller and less costly facilities and the government's principles on the building, maintenance and upgrading of facilities are still on a supply-led basis. An example in question is how the smaller island within the nation, Gozo, is still waiting for its first Olympic sized athletics track and swimming pool. On the other hand, other micro states can boast facilities of high quality, such as Luxembourg's National Sport Centre in Le Coque and Cyprus' Allegra GSP Sports Centre, both of which have been generating demonstrable performance benefits for years. Nevertheless, our questions focused on the respondents' interpretation of the quality of facilities, the availability and usability of each facility, as well as the help of the technical staff.

Another point of discussion is Malta's approach to sport science, research and innovation (pillar 9), or the lack thereof. The urgent tackling of this topic hopes to stress importance on this often-overlooked topic. In an interview, Parliamentary Secretary for Sport, Clifton Grima expressed his concern that "Malta's progress in sports medicine, science and management is at least two decades behind other European countries" (Watson, 2020). As yet, the island of Malta does not have a dedicated research centre, no systematic forms of talent identification, nor any types of genetic testing. Although it has a designated sport science department, the national university is rarely involved on matters of elite sport, specific elite sport studies are not carried out and coaches do not receive any form of scientific information from their NGB. Each and every type of these procedures have been broadly used for years the world over in the world of professional sport (Beamish, 2006). Furthermore, Green and Houlihan (2005) as well as Oakley and Green (2001b) have stressed on the importance of the "scientific backdrop" in elite sport.

Hopefully, the theoretical contribution of this paper will helps us and policy makers alike decipher the 9 pillars through three concepts we have previously highlighted, namely the macro, meso and micro level approaches. In this respect, respondents seem unconvinced that policy makers over the years have laid out the best foundations for a strong, adaptable and sustainable sport model. By probing the meso-level's quality rating over the past years, we believe that over time, this has resulted in an equally poor macro-level quality rating and a demotivated micro level.

Within this paper, we have highlighted that a structurally sound, medal-driven and well-rounded organisation is imperative for the efficient use of resources and the achievement of sporting success. Still, our sample strongly indicates that Malta's input, by definition the investment in elite sport, needs to be increased. However, after due investigation, one must begin to accept that the contention relating a lack of financial resources as responsible for unsuccessful output results is incorrect. One point of note is that since this survey was carried out, Malta's Parliamentary Secretariat for Sport, Youth and Voluntary Organizations within the Ministry of Education announced that an additional €36 million will be invested in preparation for Malta's hosting of the Small States of Europe Games in 2023. Should we refer to our brief exercise on medal costs in Table 9, the reader can confirm that the lack of investment in sport is not the problem. Winning Olympic medals involves significant investment (Williams & Ericsson, 2005), yet Malta has performed better on the international scene with far less investment. In short, this is more a matter of needing quality management rather than simply quantity resources.

Malta's financial backing is derived from the central government and partly through national lotteries. Expenditure by local councils and the private sector is generally used for grassroots athletes and for mass participation. Truth be told, the handling of resources is an incredibly challenging task, even for a small island nation like Malta. Larger countries might argue that more resources are needed per capita and that these are much harder to handle. It would be interesting to investigate how other micro-states in Europe, have managed their resources over the past years, and also to see whether their country is following a particular funding model.

In this regard, the Nordic countries, with particular attention to Iceland, are welfare states which endorse sport organization as a voluntary movement. According to Peterson (2008) voluntary organisations such as sport are fundamental to a healthy democratic system. It is for this reason that Iceland's governmental assistance is widespread across all voluntary organisations, in the form of well targeted subsidies and by investing heavily in sporting facilities (Bergsgard & Norberg, 2010). In fact, their investment in year-round indoor football stadia was one of the many pivotal determinants which saw Icelandic football soar to success (including beating England at Euro 2016). Pressure from international competition seems to have forced high ranking officials and decision makers to be proactive and efficient. Malta's NGBs follow in the same footsteps that other micro-states and have been doing so for a while now. While volunteers are commended, they simply cannot cope with the demands of a professional structure. Participants in this study made it clear that better financial support, incentives and rewards will help. Having said that, subsidies are present, however we believe that the most applicable and beneficial grants are not yet in play.

Finally, one must remember that elite sport policies must be assessed through a larger lens, rather than simply win/loss outcomes. Countries like Malta must push on with this line of investigation and continue to identify their strengths and weaknesses. Meso level players are central to the handling of all input mechanisms, as well as the enforcement of all throughput mechanisms, which should result in the preparation and platform for all local stakeholders to perform. Some of the lowest CI scores across this area clearly portray that our respondents' main concern arises from an under formulated, disorganised and poor national policy for elite sport.

6. Conclusion

Our review intended on making Malta's geographical size, populace and psycho-social attributes a major point of discussion. Despite the numerous debates, however, two different yet related major points stood out.
According to the respondents in this study, there seems to be very little variation in the scores achieved at the Meso-level, even though in the year 2020, there was an increase in involvement of sport policy makers in Malta. It was declared that NGBs should now have a sufficient amount of expenditure to raise the level of elite sport. Yet, participants' responses still expressed their disappointment in the government's abilities to support their stakeholders and increase the level of Maltese international participation. Are our respondents unaware of what is really going on? Or is sound investment not the problem here?

This point of discussion led us to question whether a comparison with De Bosscher *et al*.'s (2006, 2015) model countries is useful when examining sport in Malta. Each country investigated by SPLISS are winners of Olympic medals, possess underlining factors of international relations, diplomacy and who have placed elite sport at the forefront of their national agenda for a long time. Therefore, the approach to data collection, how it was analysed and employed deems SPLISS's contribution to understanding Micro-states unrealistic. In our eyes, their representation of this type of dependent variable study is not necessarily a helpful measure of elite sport success. This brings to light one large limitation present comparative studies such as this. In countries like Malta (and others with similar

sporting profiles) how do societal organisation relationship factors influence high performance success?

Ultimately, our results, which are linked to a multifaceted sport setting, are rooted in a broader cultural and societal context, where beliefs and norms hope to have an influence on the decisions of Maltese sport managers and policy makers. There is no denying an increase in studies such as this will help us better understand the sport policy process yet, applying such a model to Malta proves difficult. The authors have considered SPLISS as a general model, which can only provide the reader/ user with a tentative theoretical assumption on sport policy factors. From a sport policy and development point of view the factors discussed could potentially lead to international success, but the user would primarily need to identify the correct combination of successful systems to work within the nation's culture.

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